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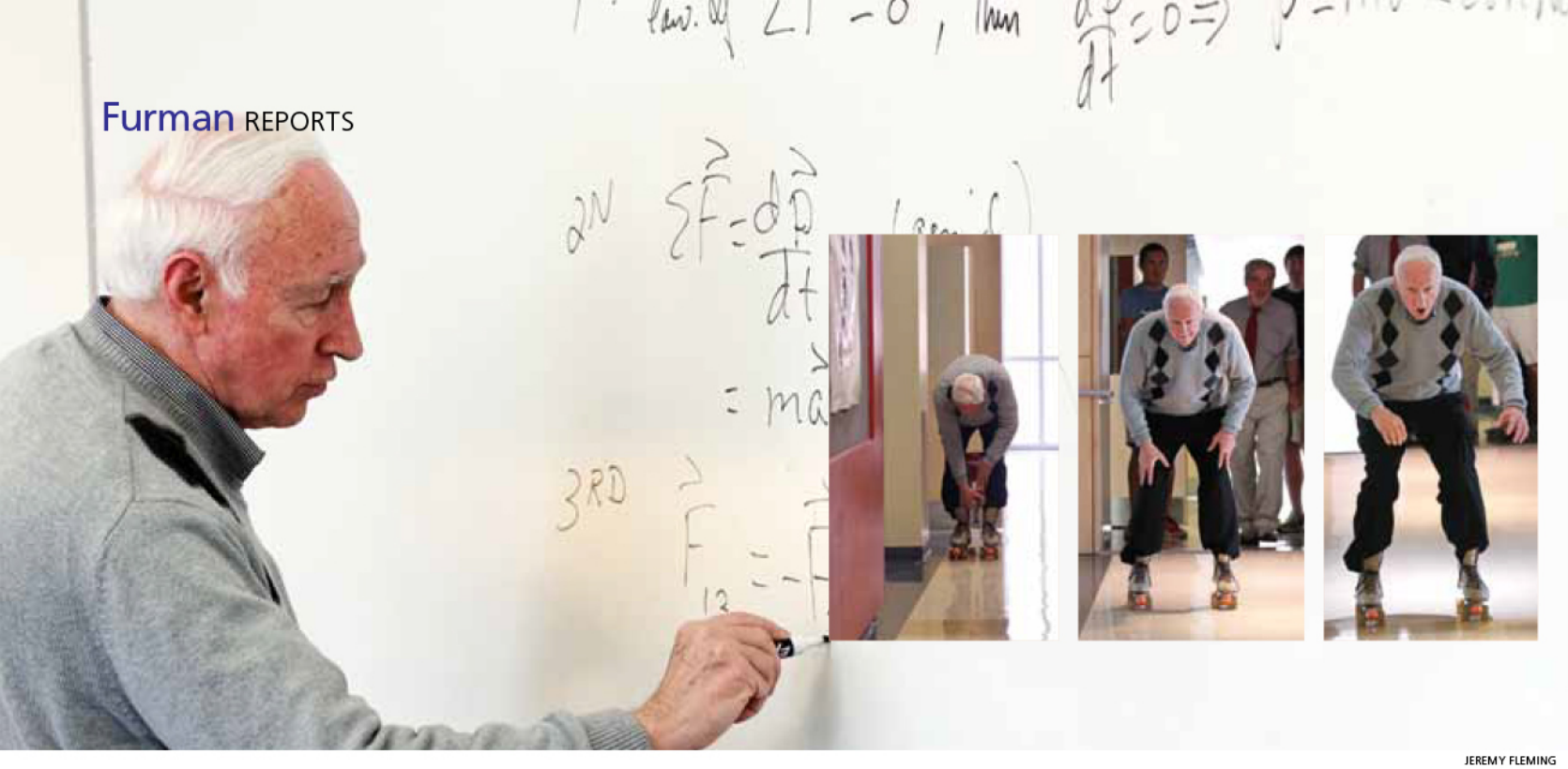

JEREMY FLEMING

A few minutes with Bill Brantley

The physics professor, 2012 recipient of the Alester G. Furman, Jr., and Janie Earle Furman Award for Meritorious Teaching, is in his 47th year on the faculty.

Education: Mercer University (undergraduate); Vanderbilt University (graduate).

Major: Physics

Arrived at Furman: 1966

Worth noting: He received the George B. Pegram Award for excellence in teaching from the Southeastern Section of the American Physical Society in 2005.

Talk about your recent roller skating adventure.
You can use it to demonstrate concepts — every action has an equal and opposite reaction, conservation of momentum, things like that. In this case I hadn't skated in a while, and I did wonder what would happen if I were to fall. Turned out it was a self-fulfilling prophecy. Someone was videotaping it, so I told them if I fell to keep shooting. Well, I hit something on the floor and wound up sprawled down a ramp. It turned into a teachable moment — a lesson in deceleration, the work/kinetic energy theorem. And I'm still here.

What were the science facilities like when you started at Furman?
When I came to interview, the middle part of Plyler Hall was all that existed. Ray and Lib Nanney (former computer science professor and his wife) showed me the 25-foot deep hole that marked the start of the rest of the building. By the time I began work on July 15, 1966, everyone was moving into the completed new quarters. Now, with the Townes Center, I've been in on the ground floor of two new facilities, and I'm working on my third.

What's the current state of physics at Furman?
I've noticed an increase of interest in physics in recent years. Physics students are not afraid to tackle hard problems, and they have high-end math tools. Twenty years ago, the typical pre-med student was a biology or chemistry major. Now you see more physics majors interested in practicing medicine, and medical schools interested in them. Physics students can apply their skills in many growing areas — biophysics, biomechanics, engineering, radiation physics/oncology, nanotechnology.

What sparked your interest in physics?
I was raised on a college campus — my father was president of Virginia Intermont. You could sometimes find physics professors, I remember one was Miss Clark, hanging around late in the day. They would take my buddies and me into the lab and show us experiments, such as how to measure the velocity of sound with a Kundt's Tube. I found it fascinating. With experiences like that, I never knew I wasn't going into physics.

Have students changed much since 1966?
The students that come our way have always been capable in math and science, so that hasn't changed. Part of what has changed is their 'sticktoittiveness' in terms of study. They also have more distractions now, more to occupy their time. And our typical student these days is quite savvy with technology. If I get stuck on something, I'll just grab a student.

Excerpt from a letter nominating Brantley for the award:
"Professor Brantley frequently notes that physics is both difficult to learn and to teach. With this in mind he is readily available to provide extra help for his students. . . . [He] is at his best in responding to students with rather severe learning challenges. He spends a great deal of personal time with each of them. The phrase 'tireless effort' really does apply to him. I am convinced that through his efforts, many students have successfully completed the science requirement at Furman, and consequently graduated, that might otherwise not have done so."